

Linyphiidae (Araneae) from South Africa. Part I: The collection of the Plant Protection Research Institute, Pretoria.

by

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The collection of Linyphiidae of the Plant Protection Research Institute, Pretoria is studied. It contains 21 species, 9 of which are new to science: *Ceratinopsis dippenaari*, *Erigone irrita*, *Pelecopsis intricata*, *Pelecopsis janus*, *Pelecopsis medusoides*, *Toschia minuta*, *Typhistes gloriosus*, *Meioneta natalensis* and *Metaleptyphantes familiaris*. The number of species of Linyphiidae known from South Africa is increased from 11 to 29.

INTRODUCTION

In his review of Afrotropical 'Erigonidae' – here treated as a subfamily – Denis (1962) listed only five species from South Africa: *Erigone vagans* Savigny & Audouin, *Erigonopsis littoralis* Hewitt, *Lucrinus putus* O. P. Cambridge, *Notioscopus australis* Simon and *Araeoncus kruegeri* Simon (the status of the latter three is uncertain and needs to be studied). Since then only one species has been added to the list, by Holm (1968): *Ostearius melanopygius* (O. P. Cambridge). Of the other subfamily, the Linyphiinae, only five representatives are known to exist in the area, four of which were mentioned in Helsdingen's revision (1969, 1970) of the *Linyphia* complex: *Frontinellina locketi* Helsdingen, *Microlinyphia sterilis* (Pavesi), *Nerienne natalensis* Helsdingen and *Nerienne obtusa* (Locket). Lawrence (1964) had previously described *Lephyphantes rimicola* from the Cape and stated that the incorporation of the species in *Lephyphantes* was provisional mainly because the South African Linyphiidae had hardly been studied. And yet, for ecological reasons (Jocqué, in press) South Africa may be expected to be rich in Linyphiidae. For the moment, more than 270 species of Linyphiidae are known from Africa south of the Sahara, and many more are to be expected (Russell-Smith, 1981). It is likely that a substantial number of these will be found in South Africa.

The present collection belongs to the Plant Protection Research Institute, Pretoria, and was sent to me for study by the courtesy of Mrs A. S. Dippenaar. It is composed of specimens caught on arable land and pastures, thus completely lacking woodland and forest species.

The following species are included: *Aulacocyba subitanea* O. P. Cambridge ♂, ♀; *Ceratinopsis dippenaari* sp. nov. ♀; *Eperigone fradeorum* (Berland) ♂; *Erigone vagans* Audouin ♂, ♀; *Erigone irrita* sp. nov. ♂, ♀; *Ostearius melanopygius* (O. P. Cambridge) ♂, ♀; *Pelecopsis intricata* sp. nov. ♂; *Pelecopsis janus* sp. nov. ♂, ♀; *Pelecopsis medusoides* sp.

nov. ♂; *Pseudomicrocentria minutissima* Miller ♂; *Toschia minuta* sp. nov. ♂; *Tybaertiella bacelarae* (Caporiacco) ♂, ♀; *Typhistes gloriosus* sp. nov. ♂, ♀; *Lepthyphantes sirimoni* Bosmans ♂, ♀; *Meioneta habra* Locket ♂, ♀; *Meioneta natalensis* sp. nov. ♂; *Meioneta prosectes* Locket ♂; *Metaleptyphantes familiaris* sp. nov. ♂, ♀; *Microlinyphia sterilis* (Pavesi) ♂, ♀; *Microlinyphia aethiopica* (Tullgren) ♀.

This list contains 21 species, 9 of which are new to science. Some of the others: *T. bacelarae*, *P. minutissima*, *M. habra* and *M. prosectes* have a pan-African distribution but were previously unknown from South Africa. *L. sirimoni* also has an extensive distribution which certainly extends into East Africa (Bosmans, 1979) and perhaps further (Bosmans & Jocqué, in press). The presence of *A. subitanea* and *E. fradeorum* is surprising. The former is known from Europe, North Africa and North America. It is supposed to have reached the New World with packing material (Wiehle, 1960). It is not unlikely that it came to South Africa by the same means, just as *E. vagans* is supposed to have done. The same could be true for *E. fradeorum*, only known from the Azores and representing a genus that is otherwise restricted to the New World.

Twenty-nine species are now known from South Africa and a high percentage of them is likely to be endemics. Our knowledge of the African linyphiid fauna is presently too scanty to discuss the meaning of this proportion.

All holotypes are in the Plant Protection Research Institute, Pretoria, some of the paratypes have been deposited in the Koninklijk Museum voor Midden-Afrika (MRAC) at Tervuren, Belgium.

Aulacocyba Simon, 1926

Aulacocyba subitanea (O. P. Cambridge)

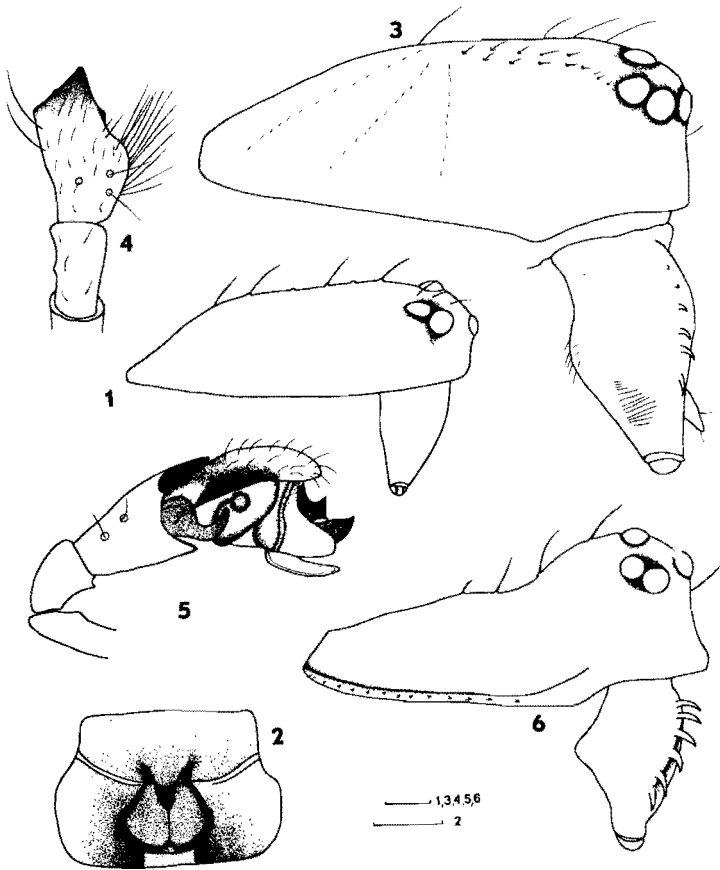
MATERIAL EXAMINED. CAPE PROVINCE: 1 ♂. Ceres (40 km NE), Touwsriver Rd., 18-27.xi.1981, A. S. Dippenaar; 1 ♀, Stellenbosch, 7.v.1975, grass, A. S. Dippenaar.

Ceratinopsis Emerton 1882

***Ceratinopsis dippenaari* sp. nov., Figs 1-2.**

FEMALE. Holotype. Total length 1,87 mm; carapace 0,83 mm long, 0,69 mm wide; ocular area 0,35 mm wide. Colour: carapace orange brown, slightly darker on striae and blackish around the eyes; legs and chelicerae orange; sternum as for carapace but darkened towards margins; abdomen dark grey with 4 pinkish impressed dots. Carapace (Fig. 1): rather flat; profile reaching its highest point just behind the PME; in the middle with a row of 6 hairs on small tubercles. Eyes: both rows straight; AME their radius apart and $0,75 \times$ their diameter from ALE; PME same size as ALE, $0,5 \times$ their diameter apart and at same distance from PLE which are slightly smaller. Clypeus slightly concave, height $1,5 \times$ diameter of an ALE. Chelicerae: length 0,32 mm; anterior margin with 2 teeth only; cheliceral ridges indiscernable. Sternum: 0,45 mm wide, 0,48 mm long; coxae IV separated by slightly less than their diameter. Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0,36	0,44	0,55	0,19	0,63	2,13
2	0,36	0,42	0,46	0,18	0,60	2,02
3	0,27	0,33	0,35	0,17	0,51	1,63
4	0,30	0,46	0,55	0,20	0,70	2,21



Figs 1-6. *Ceratinopsis dippenaari* sp. nov. 1. carapace, ♀, lateral view. 2. epigyne. *Eperigone fraderorum* (Berland) 3. carapace, ♂, lateral view. 4. palpal tibia, ♂, dorsal view. 5. palp, ♂, lateral view. *Erigone irrita* sp. nov., 6. carapace, ♂, lateral view. (scales = 0,1 mm).

Leg chaetotaxy:

	TM	position	tibial spines (proximal) Length/diameter T
1	0,41	0,14	1,1
2	0,40	0,13	1,3
3	0,42	0,17	1,6
4	—	0,16	1,8

Epigyne (Fig. 2): basically of same type as in other *Ceratinopsis* but small plate bordering posterior margin of epigyne short, narrow and almost rectangular, hardly excavated along its anterior margin as in other members of the genus; 'septum' short and triangular.

MALE. Unknown.

MATERIAL EXAMINED. Holotype ♀: SOUTH AFRICA: Cape Province, Touwsriver Road, 40 km NE Ceres, 18-27.xi.1981, A. S. Dippenaar (ACAT 81/1050).

DERIVATIO NOMINIS. The species is named after its collector Mrs A. S. Dippenaar-Schoeman.

DISCUSSION. According to its chaetotaxy and its epigyne, *C. dippenaari* is a typical representative of the genus. The flat carapace and the presence of only two teeth on the anterior margin of the chelicerae are peculiar. Other species tend to have a higher carapace and five teeth on the anterior cheliceral margin. Only additional material, and especially males, will confirm the position of this species.

Eperigone Crosby & Bishop, 1928

Parerigone Berland, 1932: 76.

Anerigone Berland, 1932: 119 (syn. nov.).

Eperigone fradeorum (Berland) comb. nov., Figs 3-5.

Parerigone fradeorum Berland, 1932: 76.

Anerigone fradeorum Berland, 1932: 119.

MALE. Total length 2,32 mm; carapace 1,09 mm long, 0,86 mm wide; ocular area 0,40 mm wide. Colour: carapace with cephalic area orange, thoracic area yellow suffused with grey on striae, fovea reddish brown. Chelicerae and palps orange; legs yellow, tinged with orange near the joints and on the patellae; sternum pale greyish brown, suffused with black near the margins; abdomen white with a grey dorsal pattern consisting of four chevrons on the posterior part and two faint triangles in front of these, all joined by a faint grey median line, sides grey, venter white with a dark quadrangle in front of the genital slit; a dark ring around pale spinnerets. Carapace (Fig. 3): cephalic part not elevated; profile almost semicircular; numerous fine hairs on striae and on postocular triangle are characteristic. Eyes: both rows straight; AME 0,4 × their diameter apart and 0,6 × that distance from ALE which are 1,2 × times as big; PME same size as ALE; PLE as big as AME; PE equidistant, distance 0,67 × diameter of PME. Clypeus straight, 2,3 times diameter of an ALE. Chelicerae (Fig. 3): length 0,59 mm; strongly tumid in middle, tapering towards apex; antero-laterally with a row of 6 teeth, these gradually smaller towards base, a big anteriomesal process near apex; stridulating file short but well developed, composed of a dozen ridges; anterior margin with 5 teeth, the second from the base biggest; posterior margin with 3 teeth, the most distal double; teeth on posterior margin bigger than those on anterior margin. Sternum: 0,59 mm wide and as long. Posterior coxae separated by 0,8 × their length. Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0,53	0,93	0,93	0,31	1,05	3,75
2	0,50	0,80	0,78	0,31	0,95	3,34
3	0,41	0,64	0,59	0,27	0,77	2,68
4	0,48	0,94	0,87	0,30	1,00	3,59

Leg chaetotaxy:

	TM	tibial spines			
		proximal position	length/ diameter T	distal position	length/ diameter T
1	0,54	0,19	1,8	0,71	1,2
2	0,51	0,23	1,3	0,68	1,1
3	0,48	0,24	1,2	0,66	1,1
4	0,49	0,25	?	—	—

Superior tarsal claws with 7 minute teeth.

Palpus (Fig. 4-5): maxillae almost rectangular, laterally with 3 denticles, each bearing a hair; tibia with 3 trichobothria and a single dorsal, almost triangular apophysis; patella with a very small ventral process at its distal end; protégulum membranous and well developed, suprategulum simple but with a strongly developed apophysis; embolic division with a strong down and forward pointing median apophysis.

MATERIAL EXAMINED. TRANSVAAL: 1 ♂, Rust de Winter, near Pretoria, 10.iii.1981, cotton field, pitfall, M. Stiller.

DISCUSSION. Although the present specimen is much smaller than males examined from the type series of *E. fradeorum* (male holotype: total length 3,17 mm, carapace width 1,17 mm, length 1,59 mm) it obviously belongs to this species. As suggested by Millidge (1977) the species should be placed in *Eperigone* in view of the structure of the male palp. The ventral and lateral processes on the tibia are indeed very small and hardly a sufficient reason to maintain this species in a separate genus. Moreover, they are very weakly developed in the South African specimen. Apart from its size, this is the only noteworthy difference from the type specimen. As *Aperigone* was created on the basis of this single male palpal character which proves to be variable – even within the same species – this genus is considered as a junior synonym of *Eperigone*.

Erigone Audouin, 1926

Erigone vagans Audouin

MATERIAL EXAMINED. CAPE PROVINCE: 1 ♂, 1 ♀, Ceres, 40 km NE (Touwsriver Rd), 18-27.xi.1981, sweeping, A. S. Dippenaar; 1 ♂, Jeffreysbay, 25.iii.1978, S. Stiermie; 1 ♂, Stellenbosch, 7.v.1975, grass, A. S. Dippenaar; 1 ♀, Stellenbosch, Welgevallen, 1973, on pasture, E. Volschenk; 2 ♂, 1 ♀, Stellenbosch, Welgevallen, 1973, lucerne & grass, E. Volschenk.

***Erigone irrita* sp. nov.**, Figs 6, 8, 10, 12, 14, 15.

MALE. Holotype. Total length 1,77 mm; carapace 0,84 mm long, 0,66 mm wide; ocular area 0,31 mm wide. Colour: carapace orange to reddish brown with blackish striae; chelicerae same colour, sternum darker blackish along its anterior margin, legs yellow to orange, abdomen pale grey. Carapace (Fig. 6): well-developed cephalic lobe carrying 3 small teeth each provided with a hair; lateral margins with about 15 denticles on each side. Eyes: both rows procurved, the posterior row only very slightly so; PME $0,4 \times$ their diameter apart and at same distance from ALE which are slightly bigger ($1,2 \times$); PME $0,67 \times$ their diameter apart and at same distance from PLE; PME slightly smaller than ALE ($0,9 \times$) and a little bigger than PLE ($1,13 \times$). Clypeus slightly concave; height $2 \times$ diameter of an ALE. Chelicerae: length 0,46 mm; with 6 long curved teeth on anterior lateral side (Fig. 6); anterior margin with 5 teeth, second and most distal ones largest; inner margin with 3 or 4 teeth. Sternum: as long as broad; 0,45 mm; anterior margin weakly in the form of an inverted V. Legs: femora of first leg with a row of 6 retroventral denticles each bearing a short hair. Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0,39	0,52	0,56	0,23	0,68	2,38
2	0,37	0,47	0,50	0,20	0,60	2,14
3	0,31	0,38	0,37	0,19	0,48	1,73
4	0,33	0,49	0,54	0,20	0,60	2,16

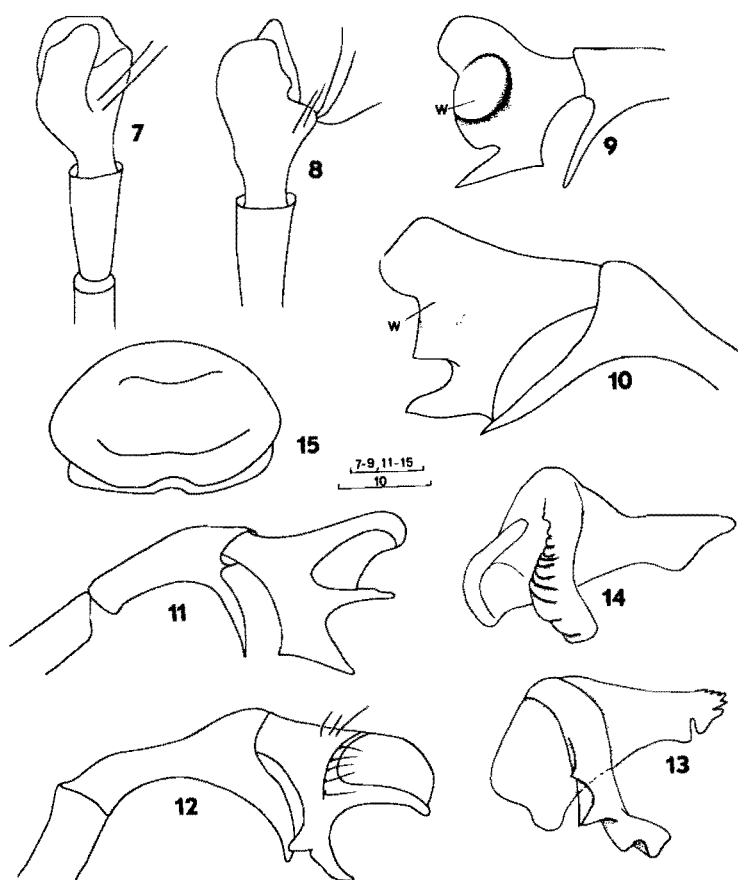
Leg chaetotaxy:

	TM	tibial spines			
		proximal	length/ diameter T		distal
		position	length/ diameter T	position	length/ diameter T
1	0,40	0,12	1,1	0,70	1,0
2	0,38	0,14	1,3	0,66	1,3
3	0,43	0,13	1,0	0,59	0,8
4	—	0,22	0,7	—	—

Palpus (Figs 8, 10, 12, 14): Femur 0,59 mm long with a row of 6 small teeth ventrally; patella (0,27 mm long) only slightly longer than tibia (0,26 mm); patellar apophysis broadly based, curved downward and slightly forward, gradually tapering toward its extremity; tibia with 3 trichobothria, distally widened, height only $0,85 \times$ its length; median apophysis longest, almost straight and pointed; ventral apophysis well developed and with a strong ventral tooth; no true dorsal apophysis but dorsal margin curved inwards forming a broad concavity which continues along mesal side of median apophysis; mesal 'window' not well-developed; bulb as in most other species of the genus except for median apophysis of embolic division which has a dozen toothlike transverse ridges.

FEMALE. Paratype. Total length 1,53 mm; carapace 0,67 mm long, 0,54 mm wide; ocular area 0,26 mm wide.

Colour: carapace greyish orange with a darker margin and striae; chelicerae same colour; sternum greyish brown with a small rectangular patch in the middle; legs pale yellow; abdomen pale grey.



Figs 7-15. *Erigone prominens* Bosenberg & Strand. 7, 9, 11 and 13. *Erigone irrita* sp. nov. 8, 10, 12, 14 & 15. 7-8. palpal tibia, ♂, dorsal view. 9-10. do., mesal view. 11-12. do., lateral view. 13-14. ventrolateral view of embolic division. 15. epigyne. (W = 'window'; scales = 0,1 mm).

Carapace: slightly elevated in cephalic area, no denticles along margin. Eyes: relative sizes and distances as in male. Clypeus slightly concave. Chelicerae: length 0,33 mm; anterior margin of fang groove with 5 teeth. Sternum: 0,39 mm, 0,44 mm long; with straight anterior margin, unlike in male. Legs: (not measured since tarsus and metatarsus of right first leg are missing and left one is abnormally developed); chaetotaxy: TM2: 0,44. Epigyne (Fig. 15): very slightly chitinated; transverse striation very superficial; posterior portion rounded rather than triangular.

MATERIAL EXAMINED. Holotype ♂: SOUTH AFRICA: Transvaal, Halfway-house between Johannesburg and Pretoria, i.1972, collected from potatoes, J. Findlay (ACAT 76/323). Paratypes: 1 ♂, same data (MRAC); 1 ♀, Natal, 14 km N Margate, 6.i.1977, sweepnet, A. S. Dippenaar (ACAT 77/255).

DERIVATIO NOMINIS. *Irritus* (L.) annoying or superfluous.

DISCUSSION. *E. irrita* is very closely related to *E. prominens* Bosenberg & Strand (Figs 7, 9, 11, 13) which is now known from most of tropical Africa, including Madagascar and the Comoros, and from Oman in the Middle East (unpublished data). The main difference between them is in the shape of the median apophysis on the embolic division which has only 3 tooth-like ridges in *E. prominens* but 12 in *E. irrita*, in which they are much more rounded (Figs 13–14) although at some angles they may appear tooth-like. The typical window on the mesal side of the palpal tibia of *E. prominens*, an oval patch of translucent chitin surrounded by a darker margin, is hardly recognizable as such in *E. irrita*. The general shape of the tibiae is also different as shown in Figs 7–12. The relative length of the palpal segments and the number of denticles on different parts is not mentioned here because these are subject to large variations, as mentioned by Holm (1977). It is not certain that the female described here is that of *E. irrita*. The differences from females of *E. prominens* are very superficial; the epigyne is less well delimited, very faintly striated and the posterior indentation appears to be bigger. Holm (1977) mentions that the clypeus of the females of *E. prominens* is straight and perpendicular. In some of the St. Helena specimens the clypeus is indeed straight but in most other specimens it is slightly but obviously concave.

Ostearius Hull, 1910

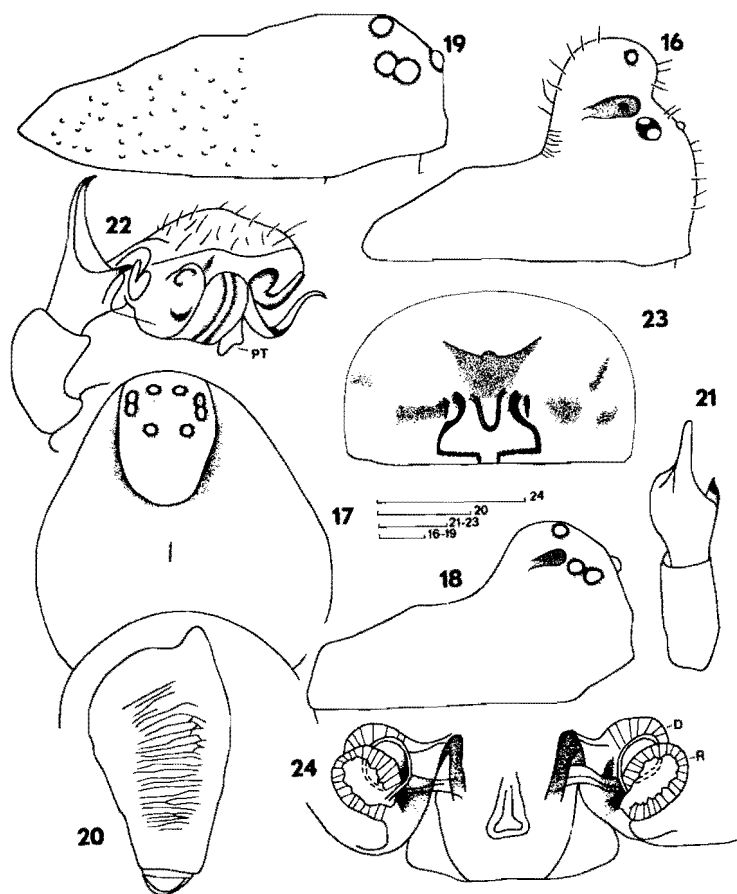
Ostearius melanopygius O. P. Cambridge.

MATERIAL EXAMINED. TRANSVAAL: 1 ♂, Rust de Winter, 10.iii.1981, pit-falls in cottonfield, M. Stiller; ♂, Bethal, Kalabasfontein, 29.i.1980, pitfall, D. Uys; 6 ♀, Carltonville, Abe Bailey Nature Reserve, 11.ii.1974, cave, twilight zone, J. Le Roy, CAPE PROVINCE: 2 ♂, 3 ♀, Peddie, Gibraltar Rock, 14.xi.1978, in poultry unit, P. E. Hulley.

Pelecopsis Simon, 1864

***Pelecopsis janus* sp. nov.**, Figs 16–24.

MALE. Holotype. Total length: 1.56 mm; carapace 0.71 mm long, 0.62 mm wide, ocular area 0.24 mm wide. Colour: carapace light brown, slightly suffused with grey in thoracic area, darker brown in cephalic area; fovea very faint; legs yellow with femora I and II darkened and same colour as the palps and chelicerae which are lighter along inner margin and at distal end; sternum medium brown; abdomen with dorsal and ventral scuta medium brown and covering opisthosoma almost completely, leaving narrow grey sides. Carapace (Figs 16–18): finely reticulate in cephalic area and with numerous impressed points in thoracic area; with shallow glabrous cephalic lobe carrying PME in holotype (typical form) (in turreted form lobe much higher and with numerous short hairs); both forms with cephalic pits in deep postocular sulci. Eyes:



Figs 16–24. *Pelecopsis janus* sp. nov. 16. carapace, ♂, turreted form, lateral view. 17. carapace, ♂, typical form, dorsal view. 18. do., lateral view. 19. female carapace, ♀, lateral view. 20. Right chelicera, lateral view. 21. palpal tibia, ♂, dorsal view. 22. male palp, ♂, lateral view. 23. epigyne. 24. vulva. (D = spermduct; R = receptaculum, PT = proregulum; scales = 0,1 mm).

Anterior row procurved; AME $0,67 \times$ their diameter apart and as far from ALE which are $1,3 \times$ as big; PME and PLE slightly larger than AME. Clypeus about $5 \times$ as high as diameter of an ALE in typical form, about $7 \times$ as high in turreted form; profile sinus in both forms convex immediately under eyes, concave just above lower margin. Chelicerae (Fig. 20): length 0,27 mm; anterior margin with 2 big teeth at distal end and a smaller isolated tooth more proximally; posterior margin with two relatively large closely set teeth; stridulating file obvious, with about 25 ridges. Sternum: smooth; 0,40 mm wide, 0,48 mm long; posterior tip separating coxae of fourth leg by slightly less than their diameter. Leg measurements (mm):

	t	Mt	T	P	F	Total	TM
1	0,29	0,35	0,38	0,19	0,47	1,68	0,47
2	0,27	0,34	0,34	0,19	0,45	1,59	0,47
3	0,25	0,32	0,28	0,17	0,40	1,42	0,47
4	0,29	0,42	0,49	0,18	0,59	1,97	—

Tibia I about $5 \times$ as long as largest diameter, tibia IV about $8 \times$ its diameter; all tibiae without spines; all tarsi fusiform; superior tarsal claws with 6 minute teeth. Palpus (Figs 21–22): palpal tibia with a strong dorsal apophysis and a shorter and pointed lateral one; paracymbium rather small, semicircular protégulum short and broadly truncated; embolus a relatively long tapering sclerite forming a complete turn; supratégulum provided with a short curved membranous apophysis, its end more or less rectangular as if transversely cut.

FEMALE. Allotype. Total length: 2,13 mm; carapace 0,90 mm long, 0,73 mm wide; ocular area 0,36 mm wide.

Colour: carapace orange brown on thoracic part, yellowish brown in cephalic area (some paratypes with darker carapace); legs and chelicerae yellowish orange, femora of first 3 pairs of legs darker, same colour as palps; sternum orange brown, suffused with black on margins; abdomen ranging from pale grey to almost black, with 4 clearly marked red impressed dots; spinnerets light brown. Carapace (Fig. 19): thoracic part deeply pitted; cephalic area slightly reticulated. Eyes: both rows procurved, posterior row strongly so; AME $0,67 \times$ their diameter apart and $1,0 \times$ diameter from ALE which are $1,7 \times$ as big; PE all of same size ($0,75 \times$ an AME) and equidistant, $1,0 \times$ diameter of a PME apart. Clypeus almost straight, 0,13 mm high ($= 2,0 \times$ diameter of an ALE). Chelicerae: 0,31 mm long, teeth as in male. Stridulating ridges less pronounced and shorter than in male but as numerous. Sternum: 0,46 mm wide, 0,51 mm long; smooth. Posterior coxae separated by their diameter. Leg measurements (mm):

	t	Mt	T	P	F	Total	TM
1	0,32	0,39	0,46	0,24	0,58	1,99	0,51
2	0,31	0,39	0,42	0,23	0,56	1,91	0,51
3	0,28	0,37	0,35	0,22	0,49	1,71	0,51
4	0,33	0,48	0,60	0,23	0,72	2,36	—

Tibia I about $4,5 \times$ as long as its greatest diameter, tibia IV about $7,5 \times$ its diameter; all tibiae without spines; superior tarsal claws with 6 minute teeth. Epigyne (Fig. 23): apparently very variable, mainly due to orientation (viewed more or less from behind, central 'U' reaching posterior margin, but running only to half way along epigyne when viewed properly ventrally) and pigmentation (area surrounded by a broken line in Fig. 23 darkly pigmented in some specimens, otherwise of same colour as surrounding area). Vulva: as in Fig. 24.

MATERIAL EXAMINED. Holotype ♂: SOUTH AFRICA: Cape Province, Touwsriver Road, 40 km NE of Ceres, 18–27.xi.1977, A. S. Dippenaar (ACAT 81/1050). Allotype ♀: SOUTH AFRICA: Cape Province, Stellenbosch, Welgevallen, 1973, on pasture, E. Volschenk (ACAT 77/817). Paratypes: 24 ♂ (typical), 9 ♂ (turreted), 24 ♀, same date as allotype (2 of each in MRAC). Other specimens: CAPE

PROVINCE: 2 ♂ (typical), 2 ♂ (turreted), 3 ♀, Nooitgedacht, Caledon, from pasture, 25.ii.1975, E. Volschenk (ACAT 76/1093); 6 ♂ (typical), 2 ♂ (turreted), 14 ♀, Stellenbosch, A. S. Dippenaar (ACAT 76/165); 1 ♂ (typical), 1 ♂ (turreted), 4 ♀, 27 km S of Middelburg, 24.iii.1976, sweepnet, grass, A. S. Dippenaar (ACAT 76/553); 2 ♂ (typical), Stellenbosch, 23.iv.1975, A. S. Dippenaar (ACAT 76/181); 1 ♂ (typical), 12 ♀, Stellenbosch, 7.v.1975, grass, A. S. Dippenaar (ACAT 76/159). TRANSVAAL: 1 ♂ (typical), 10 ♀, Maasstroom, Farm 'Al-te-ver', 17.viii.1976, under stones, A. S. Dippenaar (ACAT 76/1339); 1 ♂ (typical), Delmas, 31.i.1974, from maize, M. K. P. Meyer (ACAT 76/1853); 1 ♂ (typical), Warmbad, 8.iii.1977, sweepnet, grass, I. Vosloo (ACAT 77/463).

DERIVATIO NOMINIS. The species is named after the doublefaced Roman God 'Janus' because of the two types of males having differently shaped cephalic lobes. The species-name is thus a noun in apposition. Dimorphic or polymorphic males are known to exist in *Pelecopsis menzei* (Simon), *P. physeter* Fage, *P. alticola* (Berland) and *P. varians* (Holm) (Holm, 1979).

DISCUSSION. The species seems strongly related to *P. nigriceps* Holm from which the male differs by the absence of the lateral tooth at the base of the dorsal tibial apophysis, the presence of a short protégulum and the shape of the supratégular apophysis which is rounded and broader in *P. nigriceps*. A further important difference is the presence of cephalic pits and postocular sulci in *P. janus*. The female also resembles that of *P. nigriceps* most closely but the strongly chitinized ducts in the vulva of *P. janus* are a reliable character to separate it from any other *Pelecopsis*.

***Pelecopsis medusoides* sp. nov., Figs 30–34.**

MALE. Holotype. Total length 1,55 mm; carapace 0,71 mm long, 0,58 mm wide; ocular area 0,24 mm wide.

Colour: light orange brown suffused with black in ocular area and around cephalic lobe; legs, chelicerae and palps dark yellow; abdomen grey, without scutum, with 4 pinkish impressed dots. Carapace (Figs 30–31): strongly pitted on striae but smooth in cephalic area which is raised as a distinct lobe, rounded in front, carrying PME and some hairs and separated from rest of carapace by a deep transverse cleft; cephalic pits and postocular sulci present. Eyes: Anterior row slightly procurved; AME 0,8 × their diameter apart and 1,2 × that distance from ALE which are 2,0 × as big; posterior eyes all of same size, slightly bigger than AME. Clypeus very slightly sinuous; height 2,5 × diameter of an ALE. Chelicerae: length 0,34 mm; anterior margin with 3 teeth, 2 big and closely set near distal end of margin, third tooth smallest and isolated along proximal end. Sternum: smooth; 0,41 mm wide, 0,45 mm long; posterior coxae separated by slightly less than their diameter. Abdomen: with a very slightly chitinized small patch ventrally in front of spinnerets. Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0,39	0,44	0,55	0,18	0,61	2,12
2	0,36	0,41	0,45	0,17	0,56	1,95
3	0,31	0,35	0,35	0,16	0,47	1,64
4	0,35	0,45	0,57	0,18	0,66	2,21

Leg chaetotaxy:

	TM	position	tibial spines (proximal) Length/diameter T
1	0,41	0,37	0,57
2	0,41	0,40	0,71
3	0,40	0,31	1,33
4	—	?	?

Tibia I about $7 \times$ as long as largest diameter, tibia IV about $8 \times$ its diameter; tibiae with one spine; superior tarsal claws with 5 minute teeth. Palpus (Figs 32–34): palpal tibia with 3 apophyses, biggest one very slender and curved upward with its base on mesal side, dorsal one short blunt and triangular, lateral one very short semicircular and transparent; paracymbium very simple; bulbus unusual with well-developed slender protégulum and very big embolic division with broad plate-like embolus, embolic apophysis and membranous conductor; suprategular apophysis very small and invisible in unexpanded palp.

FEMALE. Unknown.

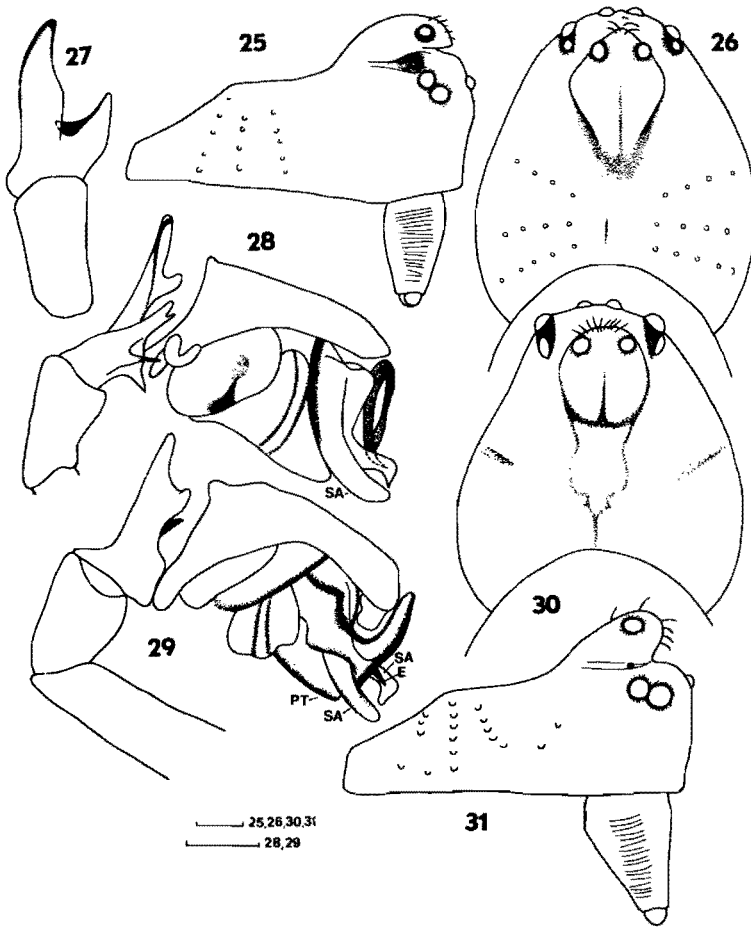
MATERIAL EXAMINED. Holotype ♂: SOUTH AFRICA: Cape Province, Stellenbosch, 30.v.1975, A. S. Dippenaar (ACAT 76/165). Paratype: 1 ♂, SOUTH AFRICA: Cape Province, Stellenbosch, Welgevallen, 1973, on lucerne and grass, E. Volschenk (MRAC).

DERIVATIO NOMINIS. The name refers to the presence of some important features in common with *P. medusa* (Simon).

DISCUSSION. Together with *P. medusa*, the present species is a marginal *Pelecopsis*, and the resemblance between them is only superficial: a long process on the palpal tibia and a rather long and narrow protégulum. *P. medusoides* differs from any other *Pelecopsis* by the very big plate-like embolus, the presence of a long dorso-mesal tibial apophysis and the absence of a scutum in the male.

***Pelecopsis intricata* sp. nov.**, Figs 25–29.

MALE. Holotype. Total length 1,44 mm; carapace 0,68 mm long, 0,57 mm wide; ocular area 0,26 mm wide. Colour: carapace, chelicerae and palp orange brown darkened around eyes; sternum orange, suffused with black on frontal margin; legs pale yellow with femora I and II darker orange brown; abdomen grey with 4 reddish impressed dots and a slightly chitinized area between them. Carapace (Figs 25–26): slightly pitted on striae, smooth elsewhere; with distinct cephalic lobe somewhat narrowed in front and separated from rest of cephalic area by a deep transverse cleft with rounded tip carrying a small cluster of hairs; cephalic pits and sulci present. Eyes: Anterior row procurved; AME $0,8 \times$ their diameter apart and $2,0 \times$ that distance from ALE which only slightly bigger ($1,2 \times$); PME same size as ALE; PLE as big as AME. Clypeus sinuous, convex immediately under eyes, slightly concave above margin;



Figs 25–31. *Pelecopsis intricata* sp. nov. 25. carapace, ♂, lateral view. 26. do., dorsal view. 27. palpal tibia, ♂, dorsal view. 28. right palp, ♂, lateral view. 29. left palp, ♂, mesal view. *Pelecopsis medusoides* sp. nov. 30. carapace, ♂, dorsal view. 31. do., lateral view. (E = embolus; PT = protegulum; SA = suprategular apophysis; scales = 0.1 mm).

height slightly more than $4 \times$ diameter of an ALE. Chelicerae: length 0,31 mm, anterior margin with 3 teeth, both closely set; distal teeth bigger than isolated proximal tooth; posterior margin with 2 teeth; stridulating file long, ridges clearly marked. Sternum: 0,45 mm long, 0,41 mm wide; posterior tip separating coxae of fourth pair of legs by their diameter. Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0,33	0,39	0,42	0,18	0,52	1,84
2	0,31	0,37	0,38	0,18	0,49	1,73
3	0,27	0,32	0,29	0,16	0,40	1,44
4	0,32	0,44	0,51	0,17	0,58	2,02

Leg chaetotaxy:

	TM	position	tibial spines (proximal) Length/diameter T
1	0,45	0,12	0,29
2	0,43	0,13	0,43
3	0,38	0,18	0,50
4	—	0,31	0,67

Tibia I about $8 \times$ as long as largest diameter, tibia IV only a little more slender; tibial spines very short gradually longer from first to last tibia. Palpus (Figs 27–29): tibia with 4 apophyses, 2 of which with an excrescence; cymbium with a short horn at base; protegulum well-developed; supratregulum with big apophysis and membranous conductor; embolus of typical *Pelecopsis* type.

FEMALE. Unknown.

MATERIAL EXAMINED. Holotype ♂: SOUTH AFRICA: Cape Province, Stellenbosch, Welgevallen, 1973, on pasture, E. Volschenk (ACAT 77/817). Paratype: 1 ♂, same data (MRAC).

DERIVATIO NOMINIS. *Intricatus* is Latin for complicated, referring to the complex apophyses on the male palpal tibia.

DISCUSSION. Like the preceding species, *P. intricata* is an unusual *Pelecopsis* regarding its peculiarly shaped palpal tibia but mainly because of the strong development of the supratregular apophyses. These features make it easily recognizable. Other diagnostic characters are the extremely short tibial spines, the absence of an abdominal scutum and the shape of the cephalic lobe in the male.

Pseudomicrocentria Miller, 1970

Pseudomicrocentria minutissima Miller.

MATERIAL EXAMINED. TRANSVAAL: 3 ♂, Roodeplaatdam Nature Reserve (near Pretoria), 30.i.1980, grass, sweepnet, A. S. Dippenaar.

Toschia Caporiacco, 1949*Toschia minuta* sp. nov., Figs 35–37.

MALE. Holotype. Total length 1,35 mm; carapace 0,68 mm long, 0,53 mm wide; ocular area 0,27 mm wide. Colour: carapace yellowish brown; sternum brown; abdomen dark grey with faint median stripe. Carapace: as in Fig. 35. Eyes: both rows straight; AME 0,25 × diameter apart and at same distance from ALE which are 1,25 × as big; PME same size as ALE, 0,4 × their diameter apart and at same size as AME. Clypeus straight, height 1,2 × diameter of an ALE. Chelicerae: 0,28 mm long; 5 teeth on anterior margin; stridulating ridges faint and widely spaced, about 15 in number. Sternum: as long as wide (0,40 mm); posterior tip separating coxae IV by 0,75 × their largest diameter. Legs: tarsi of legs I and II fusiform; no teeth on superior tarsal claws; measurements (mm):

	t	Mt	T	P	F	Total
1	0,36	0,42	0,45	0,18	0,54	1,95
2	0,33	0,40	0,42	0,17	0,52	1,84
3	0,29	0,36	0,34	0,15	0,44	1,58
4	0,33	0,50	0,51	0,18	0,59	2,11

TM1: 0,48; TM2: 0,47; TM3: 0,44; TM4: 0,46; most spines lost, distal spine on T IV at 0,74 and 1,25 × tibial diameter long. Palpus (Figs 36–37): tibia with 2 sharp dorsal apophyses, mesal one biggest, 3 trichobothria; paracymbium with a distally widened lateral arm bearing 4 long hairs at its base; proximal arm with a group of 6 short hairs, distal apophysis of embolic division long and sinuous.

FEMALE. Unknown.

MATERIAL EXAMINED. Holotype ♂: SOUTH AFRICA: Transvaal; Roode-plaatdam Nature Reserve, 9.xii.1980, sweepnet, grass, M. Stiller (ACAT 81/906).

DERIVATIO NOMINIS. *Minutus* is Latin for very small, and this species is by far the smallest *Toschia* known.

DISCUSSION. The genera *Toschia*, *Atypena* and *Oedothorax* are closely related (see Jocqué 1983) and it is often difficult to place a species with certainty without a detailed study of the male palp. As only one specimen is available, the palps were left unexpanded. There are good indications though, that the species belongs in *Toschia*: the fusiform tarsi on legs I and II, the absence of a cephalic lobe, the paracymbium with a distally widened arm. The latter is peculiar in having four long hairs at its base, absent in other representatives of the genus. This species further recognizable by the short tibial apophyses and its small size.

Tybaertiella Jocqué 1979*Tybaertiella bacelarae* (Caporiacco)

MATERIAL EXAMINED. NATAL: 1 ♂, 1 ♀, Research Station Josini, 19.ix.1972, in leaf litter, G. C. Loots; 1 ♀, La Mercy, 23.i.1980, sweepnet, grass, C. J. Cilliers.

TRANSVAAL: 2 ♀, Nelspruit, 19.i.1977, grass, sweepnet, V. Burger; 3 ♀, Warmbad, 17.ii.1977, grass, I. Vosloo; 1 ♂, Verena (3 km), 10.ii.1977, mixed grass, I. Vosloo; 1 ♀, Halfway House, i.1972, potatoes, J. Findlay; 1 ♂, Loskopdam, 2.iv.1973, grass, sweepnet, A. S. Dippenaar.

Typhistes Simon, 1894

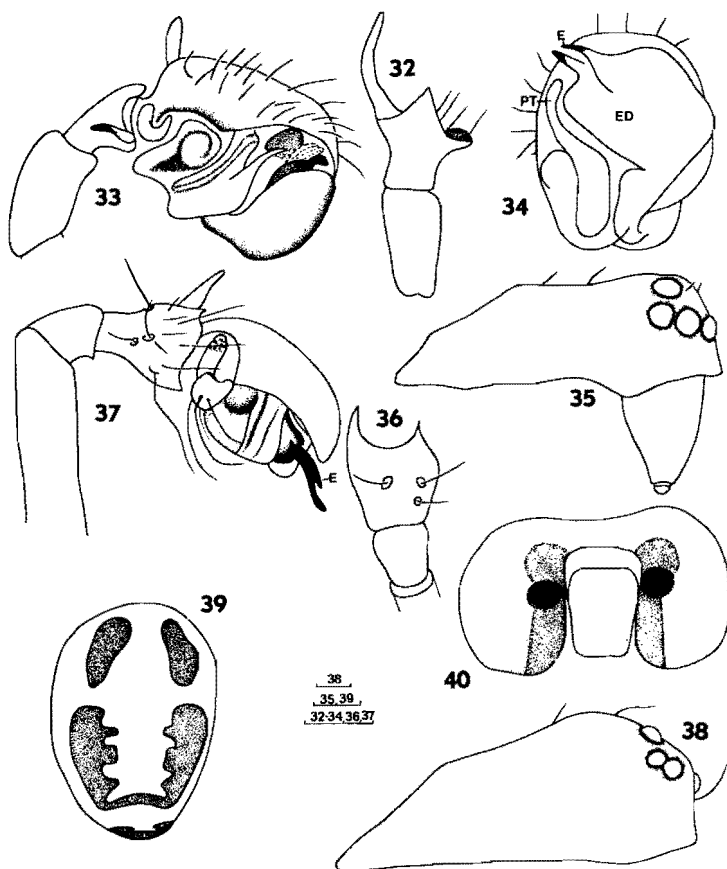
Typhistes gloriosus sp. nov., Figs 38–45.

MALE. Holotype. Total length 1.90 mm; carapace 0.83 mm long, 0.68 mm wide; ocular area 0.37 mm wide. Colour: carapace bright orange, slightly darkened in eye region; legs and palps orange; chelicerae orange red; sternum orange, most often suffused with black, becoming darker towards margins; abdomen white with contrasting black pattern (dorsally 2 black patches in front followed by 2 longitudinal black lines with big sawteeth on internal margins (Fig. 39), very variable, of smaller isolated patches or of bigger ones which may merge and form a continuous longitudinal band; a black ring circles yellow spinnerets; ventrally 2 lateral longitudinal bands may be continuous and merging with the black ring around spinnerets or broken into several isolated blotches; sometimes a black to grey transverse stripe linking longitudinal ones halfway between spinnerets and genital slit). Carapace (Figs 41–42) weakly reticulated; with big cephalic lobe carrying PME, broader than high and slightly protruding in middle with short curved hairs, separated from rest of cephalic area by a deep cleft with cephalic pits; frontal part of lower cephalic area covered with thick short outwardly directed hairs. Eyes: Anterior row very slightly recurved; AME their radius apart and $1.25 \times$ their diameter from ALE which are $1.25 \times$ as big; PME $1.5 \times$ ALE. Clypeus concave; its height $2.5 \times$ diameter of an ALE. Chelicerae: length: 0.51 mm; anterior margin with 6 teeth, distal tooth smallest and only $0.33 \times$ length of biggest tooth (second from mesal side); posterior margin with 4 smaller teeth. Chelicerae completely covered with scale-like reticulations (as described by Jocqué & Bosmans 1982), probably serving as stridulating file as they are bigger and more pronounced on lateral margin. Sternum: 0.47 mm wide, 0.54 mm long; roughly triangular and ending in a rather pointed tip; posterior coxae separated by about $0.67 \times$ diameter only. Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0.50	0.77	0.84	0.26	0.91	3.28
2	0.46	0.74	0.72	0.26	0.85	3.03
3	0.39	0.62	0.58	0.23	0.74	2.56
4	0.47	0.86	0.84	0.23	0.94	3.34

Leg chaetotaxy:

	TM	tibial spines			
		proximal	tibial spines		distal
		position	length/diam. tibia	position	length/diam. tibia
1	0.69	0.24	1.1	0.76	0.9
2	0.66	?	?	?	?
3	0.65	0.25	2.8	—	—
4	?	?	?	—	—



Figs 32-40. *Pelecopsis medusoides* sp. nov. 32. palpal tibia, ♂, dorsal view. 33. palp, ♂, lateral view. 34. bulbus of palp, ♂, ventral view. *Toschia minuta* sp. nov. 35. carapace, ♂, lateral view. 36. palpal tibia, ♂, dorsal view. 37. palp, ♂, lateral view. *Typhistes gloriosus* sp. nov. 38. carapace, ♀, lateral view. 39. abdomen, dorsal view. 40. epigyne. (E = embolus; ED = embolic division; PT = protegulum; scales = 0,1 mm).

Superior tarsal claws with 2 minute teeth, tibia I about $8,5 \times$ as long as diameter; tibia IV approximately $10,5 \times$ its largest diameter. Palpus (Figs 43-44): tibia with a short truncated mesal apophysis and a long dorsal one, the latter with small denticles at extremity, at the base with 2 strong lateral hairs; lateral side of paracymbium with a broad translucent band; paracymbium with narrow proximal part and widened distal arm, each with a group of a few hairs; protegulum well-developed and ending in a simple unmodified membrane covering big apophysis of embolic division, latter complex and comprising a long and broad embolus describing $\frac{3}{4}$ of a circle, a short sharp apophysis directed forwards and a long blunt one pointing down; supratergular apophysis short and broad and only visible from the lateral side.

FEMALE. Total length: 2,58 mm; carapace 1,03 mm long, 0,77 mm wide; ocular area 0,39 mm wide. Colour: as in male but posterior end of carapace with a darkened margin and ocular area more markedly darkened; abdominal pattern usually with bigger patches more often merging into continuous lines. Carapace (Fig. 38): weakly reticulate. Eyes: anterior row procurved, posterior row straight; AME 0,25 \times diameter apart and 1,25 \times that distance from ALE which are 1,5 \times as big; PME 1,4 \times as big as AME, 0,7 \times their diameter apart and 0,5 \times that distance from PLE which are same size as ALE. Clypeus concave, height 1,6 \times diameter of an ALE. Chelicerae: 0,56 mm long; as in male but lateral sides more convex; posteriorly with a boss carrying several strong hairs, more pronounced than in male. Sternum: 0,54 mm wide, 0,47 mm long; posterior coxae separated by 0,8 \times their diameter.

Legs measurements (mm):

	t	Mt	T	P	F	Total
1	0,51	0,89	0,86	0,29	0,97	3,52
2	0,43	0,74	0,77	0,29	0,92	3,15
3	0,40	0,64	0,61	0,24	0,80	2,69
4	0,49	0,89	0,90	0,25	1,02	3,55

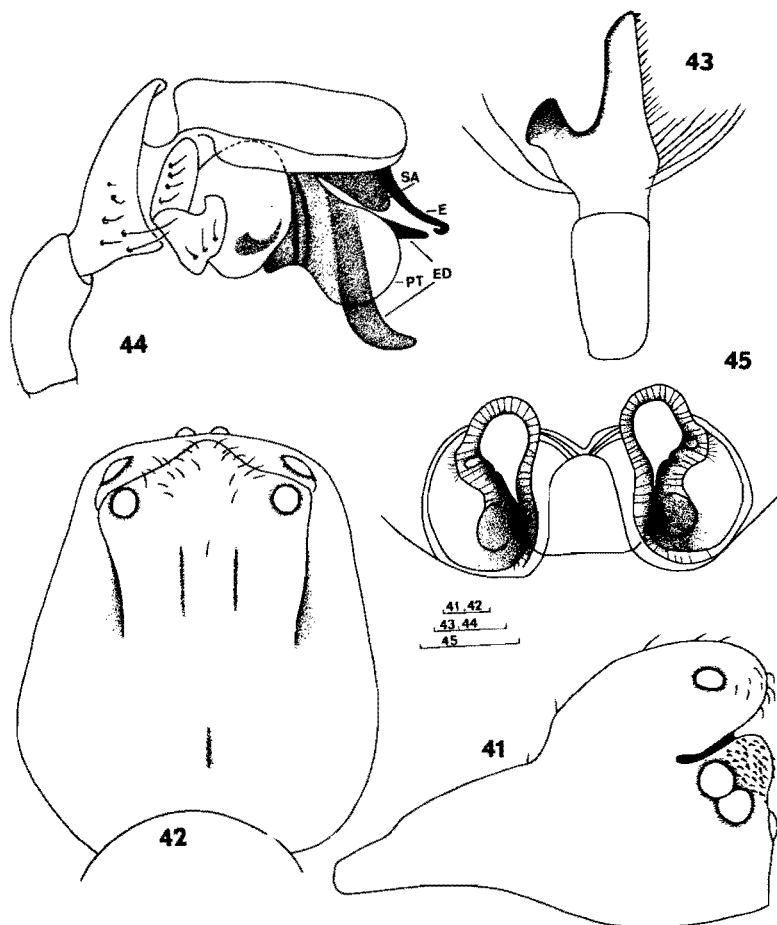
Leg chaetotaxy:

TM	tibial spines				
	proximal		distal		
	position	length/ diameter tibia	position	length/ diameter tibia	
1	0,62	0,25	2,6	0,72	1,87
2	0,69	0,22	2,6	0,73	1,75
3	0,66	0,22	2,9	—	—
4	0,70	0,25	4,1	—	—

Tibia I about 8,5 \times as long as largest diameter, tibia IV 10 \times diameter; tarsal claws with a few minute teeth. Epigyne (Fig. 40): a roughly oval sclerified area with a deep longitudinal opening from posterior end to about 0,67 \times its length; opening closed by a plate-like sclerite. Vulva: as in Fig. 45.

MATERIAL EXAMINED. Holotype δ : SOUTH AFRICA: Cape Province, East London, Pineapple research station, 2.xii.1977, G. Petty (ACAT 77/1200). Female allotype δ : same data. Paratypes: 5 δ , 47 δ , same data (2 δ , 4 δ in (MRAC); 1 δ , Cape Province, East London, Fort Grey, 2.xii.1977, A. S. Dippenaar (ACAT 77/1160).

DISCUSSION. Although *Typhistes* is a very poorly known genus, there is little doubt that its type species, *T. comatus* Simon, belongs in the group of genera including *Oedothorax* Bertkau and *Atypena* Simon, senior synonym of *Callitrichia* Fage (Jocqué 1983). The only other African representative, *T. elephas* Fage from Ethiopia is apparently not congeneric with *T. comatus* both of which I have seen specimens of in the Simon collection (MNHN, Paris). This collection appears to contain two closely related species both labelled *T. comatus*. The specimens I have seen do not belong to the type



Figs 41–45. *Typhistes gloriosus* sp. nov. 41. carapace, ♂, lateral view. 42. do., dorsal view. 43. palpal tibia, ♂, dorsal view. 44. palp, ♂, lateral view. 45. vulva. (E = embolus; ED = embolic division; PT = protegulum; scales = 0,1 mm).

species, but, according to Holm's description (in litt.) they are indeed very closely related to it and certainly belong to the same genus. Holm considers *Typhistes* to be a valid genus on the basis of the well-developed protegulum and the presence of two spines on tibia IV, the latter feature absent in *T. gloriosus*. The characters it has in common with the type species and probable representatives of the genus I have seen are the high, toothed tibial apophysis, the strong hairs on the lateral base of the palpal tibia and the protegular development. The shape of the embolic division is quite variable and none of the species I have seen specimens or drawings of has a long downpointing

apophysis, as in *T. gloriosus*, which is so characteristic of some *Atypena* species. The systematic position of *T. gloriosus* is therefore doubtful. It may well be that it should be placed in a new genus on account of the characters of the male (protegulum, palpal tibia) and of the unusual epigyne. The stridulating file composed of scales is also very unusual and it is the first time that it is recorded in Linyphiidae. This character may be useful on a generic level but it is not known whether the other species currently placed in *Typhistes* have the same type of stridulating organ. Although Jocqué & Bosmans (1982) hesitated to use the type of cheliceral ridges as a character to group a number of Hahniidae in the genus *Iberina*, it is obvious that the presence of scaly stridulating ridges must be regarded as an apomorphy, being an evolutionary feature which deviates from all linyphiids so far described. A revision of the genus will probably elucidate most of these points.

Lepthyphantes Menge, 1866

Lepthyphantes sirimoni Bosmans

MATERIAL EXAMINED. TRANSVAAL: 1 ♀, Carltonville, Abe Bailey Nature Reserve, 11.ii.1979, cave, twilight zone, J. le Roy; 1 ♂, Bethal (10 km), 13.v.1978, grass, sweepnet, S. Stiermie. CAPE PROVINCE: 1 ♂, 1 ♀, Stellenbosch, 7.v.1975, grass, E. Volschenk.

The female of this species has not yet been described but this will be done by Bosmans & Jocqué (in press) on the occasion of its incorporation in a new genus.

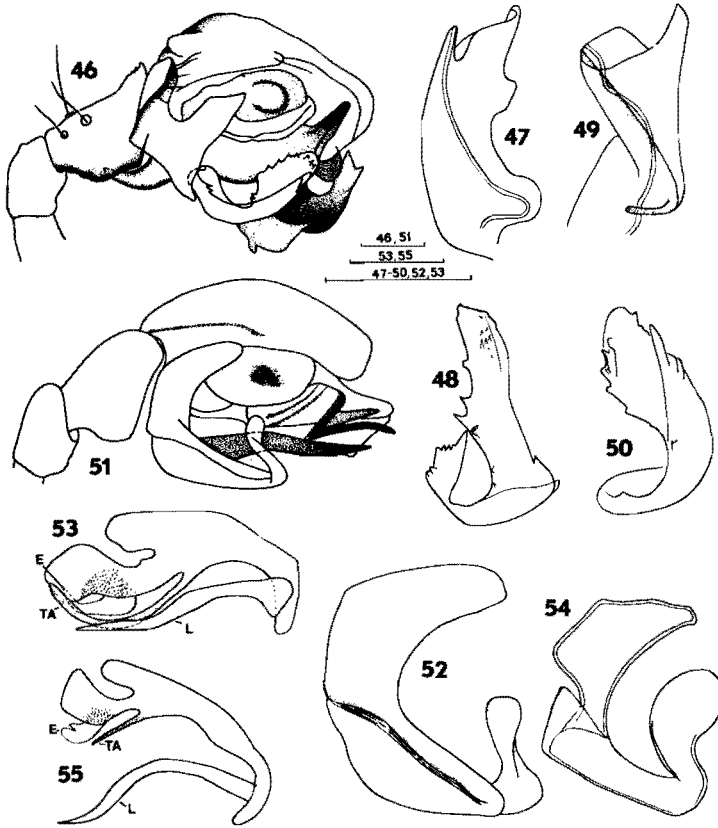
Meioneta Hull, 1920

Meioneta natalensis sp. nov., Figs 46, 49, 50

MALE. Total length 1,48 mm; carapace 0,62 mm long, 0,46 mm wide; ocular area 0,23 mm wide. Colour: carapace orange brown, slightly suffused with grey, a dark line along margin; legs dark yellow; coxae, trochanters and proximal ends of metatarsi lighter; palps, chelicerae and sternum same colour as carapace; abdomen and spinnerets dark grey. Carapace: smooth; profile slightly concave between eyes and fovea. Eyes: Anterior row straight, posterior row slightly recurved; AME 0,33 × their diameter apart and at same distance from ALE which 0,33 × diameter larger; PME slightly bigger than AME, slightly more than their radius apart and at same distance from PLE which as big as AME. Clypeus concave, 1,5 × as high as diameter of an ALE. Chelicerae: length 0,26 mm; anterior margin with 4 teeth, second tooth from mesal side biggest; posterior margin with 2 small teeth. Sternum: 0,40 mm long, 0,34 mm wide; posterior coxae separated by their diameter.

Leg measurements (mm):

	t	Mt	T + P	F	Total
1	0,35	0,47	0,70	0,56	2,06
2	0,32	0,43	0,57	0,52	1,84
3	0,27	0,34	0,46	0,45	1,52
4	0,31	0,44	0,64	0,58	1,97



Figs 46–55. *Meioneta natalensis* sp. nov. 46. palp, ♂, lateral view. 49. embolus, dorsal view. 50. lamella, ventrolateral view; *Meioneta gracilipes* Holm. 47. embolus, dorsal view. 48. lamella, ventrolateral view. *Metaleptyphantes familiaris* sp. nov. 51. palp, ♂, lateral view. 52. paracymbium, lateral view. 53. embolic division, ventrolateral view. *Metaleptyphantes perexiguus* (Simon & Fage). 54. paracymbium, lateral view. 55. embolic division, ventrolateral view. (E = embolus; L = lamella; TA = terminal apophysis; scales = 0,1 mm).

TM 1: 0,32. Spines on tibia I approximately twice as long as diameter of segment. Palpus: tibia ventrally convex, with a very short dorsal apophysis provided with small denticles at its distal margin; cymbium with a strong hornlike excrescence on basoven-tral side, curved and sharp at tip; palpal organs as in Figs 46, 49, 50. Abdomen: oval, much less cylindrical than in *M. gracilipes* Holm.

FEMALE. Unknown.

MATERIAL EXAMINED. Holotype ♂: SOUTH AFRICA: Natal, Pongola, 21.ix.1972, leaf litter, G. C. Loots (ACAT 76/1870).

DERIVATIO NOMINIS. The species name is derived from the South African province where the holotype was collected.

DISCUSSION. *M. natalensis* is closely related to *M. gracilipes* Holm with which it shares the cymbial hornlike excrescence. However, in *M. natalensis* this horn never appears truncated, as it does in *M. gracilipes* when seen from below or from above. Apart from somatic characters such as the disposition of the eyes, the shape of the eye-curves and clypeus, the more rounded carapace and abdomen and the higher value of TM 1 in *M. natalensis*, the main difference between these species is in the shape of the palpal organs, the lamella characteristica and the embolus, as shown in Figs 47–50.

Meioneta habra Locket

MATERIAL EXAMINED. NATAL: 1 ♂, 1 ♀, Cathedral Peak, 14.x.1972, A. S. Dippenaar; 1 ♂, Margate, 14 km N, 6.i.1977, sweepnet, A. S. Dippenaar. TRANSVAAL: 1 ♂, Magoebaskloof, 24.ii.1976, grass, sweepnet, A. S. Dippenaar; 1 ♂, Bronkhorstspuit, 10.ii.1944, grass, sweepnet, I. Vosloo. CAPE PROVINCE: 8 ♂, 3 ♀, Stellenbosch, Welgevallen, 1973, lucerne & grass, E. Volschenk, 1 ♂, 5 ♀, Stellenbosch, Welgevallen, 1973, pasture, E. Volschenk; 2 ♂, Stellenbosch, Elsenberg, 8.v.1972, E. Volschenk, 2 ♀, Stellenbosch, 7.v.1975, grass, E. Volschenk; 1 ♀, Addo, Elephant Park, 14.ii.1974, M. Meyer; 1 ♀, Caledon, Nootgedacht, 28.ii.1972, pasture, E. Volschenk.

Meioneta prosectes Locket

MATERIAL EXAMINED. TRANSVAAL: 1 ♂, Pretoria, Roodeplaat Research Station, i.1972, potatoland, J. Findlay.

Metaleptyphantes Locket, 1968

Metaleptyphantes familiaris sp. nov., Figs 51–53, 56–59

MALE. Holotype. Total length 1.57 mm; carapace 0.64 mm long, 0.50 mm wide; ocular area 0.23 mm wide. Colour: chelicerae and carapace light brown, latter darkened along margin; legs yellow, front and back of femora I and II and distal extremities of tibiae and coxae darkened; sternum dark yellow completely suffused with black except some bright yellow points; abdomen and spinnerets grey. Carapace: rather flat, highest point of profile at PME. Eyes: anterior row straight; AME slightly more than their radius apart, about $0.25 \times$ their diameter from ALE which slightly bigger; PE equidistant, at $1.0 \times$ radius of PME from each other; PME as big as ALE and PLE slightly smaller than AME. Chelicerae: length 0.30 mm; both margins with 4 teeth; stridulating ridges weak and very closely set, about 45 in number. Sternum: 0.40 mm long, 0.32 mm wide.

Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0.41	0.56	0.62	0.18	0.69	2.46
2	0.39	0.51	0.55	0.17	0.65	2.27
3	0.33	0.44	0.42	0.16	0.53	1.88
4	0.40	0.60	0.63	0.17	0.72	2.52

Leg chaetotaxy:

	TM	tibial spines			
		proximal		distal	
		position	length	position	length
1	0,30	0,29	1,0	0,68	1,2
2	0,31	lost		lost	
3	0,30	0,31	1,0	0,79	1,2
4	—	0,36	1,1	lost	

Palpus (Figs 51–53): paracymbium rather simple and without teeth, its distal arm ending in the shape of a plate whose plane is at an angle of about 75° to longitudinal axis; embolus fairly short, radix extended backwards and bearing long slightly sinuous lamella.

FEMALE. Paratype. Total length 1,73 mm; carapace 0,70 mm long, 0,52 mm wide; ocular area 0,26 mm wide. Colour: very much as in male but generally darker. Carapace: higher than in male with cephalic area more pronounced. Eyes: posterior row straight, anterior row slightly procurved; AME slightly more than their radius apart but only $0,25 \times$ their diameter from ALE which slightly bigger; PE equidistant, all $1,0 \times$ radius of a PME apart; PME same size as ALE; PLE as big as AME. Chelicerae: length 0,31 mm; teeth and stridulating ridges as in male. Sternum: 0,35 mm; teeth and stridulating ridges as in male. Sternum: 0,35 mm wide, 0,44 mm long.

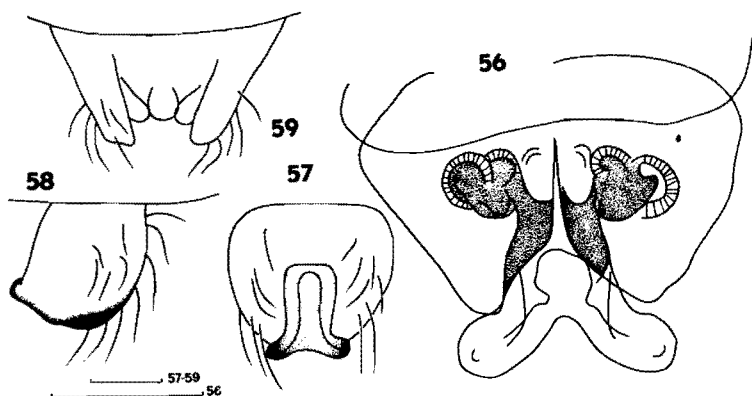
Leg measurements (mm):

	t	Mt	T	P	F	Total
1	0,40	0,57	0,61	0,18	0,70	2,46
2	0,36	0,55	0,55	0,17	0,65	2,28
3	0,32	0,48	0,43	0,16	0,55	1,94
4	0,37	0,61	0,66	0,17	0,75	2,56

Leg chaetotaxy:

	TM	tibial spines			
		proximal		distal	
		position	length/ diameter tibia	position	length/ diameter tibia
1	0,28	0,25	1,25	0,72	1,3
2	0,29	0,24	1,5	0,72	1,0
3	0,27	0,33	1,7	0,72	1,3
4	—	0,30	1,5	0,79	1,0

Epigyne (Figs 57–59): strongly bulging; ventral area with an inverted-u-shaped concave chitinous area, its length approximately $0,67 \times$ length of epigyne; ending in 2 wing-like excrescences pointing towards sides. Vulva (Fig. 56): seminal ducts ending halfway along wing-shaped structures of epigyne.



Figs 56-59. *Metaleptyphantes familiaris* sp. nov. 56. vulva. 57. epigyne, dorsal view. 58. do., lateral view. 59. do., from behind. (Scales = 0.1 mm).

MATERIAL EXAMINED. Holotype ♂: SOUTH AFRICA: Cape Province, Stellenbosch, Welgevallen, 1972, on pasture, E. Volschenk (ACAT 77/817). Allotype ♀: same data. Paratypes: Cape Province: 8 ♂, 4 ♀, same data (2 ♂, 2 ♀ in MRAC); 1 ♂, Cradock, 23.iii.1976, sweepnet, grass, A. S. Dippenaar (ACAT 76/630); 5 ♂, Stellenbosch, Elsenberg, 2.v.1972, E. Volschenk (ACAT 76/1096); 1 ♀, Stellenbosch, Welgevallen, 1973, lucerne and grass, E. Volschenk (ACAT 77/818); 1 ♀, Stellenbosch, 30.v.1975, A. S. Dippenaar (ACAT 76/165).

DERIVATIO NOMINIS. At first glance the species seemed to be a very well-known one and was therefore called *familiaris*.

DISCUSSION. *M. familiaris* is closely related to *M. perexiguus* Simon & Fage. Somatic differences are the slightly recurved anterior row of eyes and the elongated sternum (length/width 1.25) in *M. familiaris* (sternum about as wide as long in *M. perexiguus*). The main differences are in the secondary genital organs of the male as shown in Figs 51-55. The epigyne and vulva are evidently different from those of *M. perexiguus* as drawn by Locket (1968:111). The wing-like excrescences which in *M. perexiguus* only appear when the vulva is expanded, are always visible in *M. familiaris*.

Microlinyphia Gerhardt, 1928

Microlinyphia sterilis (Pavesi).

MATERIAL EXAMINED. TRANSVAAL: 1 ♂, Loskopdam, A. S. Dippenaar; 2 ♀, Middelburg (Belfast Rd.), 11.iv.1978, G. Nel; 2 ♂, 1 ♀, Roodeplaat Res. Stat. (17 km NE Pretoria), 5.vii.1976, Strawberry beds, L. Venter; 1 ♂, 2 ♀, Sabie, 20.ii.1978, grass, sweepnet, E. van de Berg; 1 ♀, Nylsvley, Naboomspruit, iii.1977, grass, G. Ferreira; 3 ♀, Ermelo, 22.ii.1947, grass, sweepnet, I. Vosloo; 1 ♂, 2 ♀, Olifantsfontein, 29.x.1947, Strawberryland, L. Venter; 1 ♂, 1 ♀, Delmas (21 km Leslie Rd), 13.iv.1978, grass, sweepnet, S. Stiermie. CAPE PROVINCE: 3 ♀, Cradock,

23.iii.1976, grass, sweepnet, A. S. Dippenaar; 1 ♀, Cradock Mountain Zebra Park, 23.iii.1976, herbs, sweepnet, A. S. Dippenaar; ♂, ♀, Stellenbosch, Welgevallen, 1973, lucerne and grass, E. Volschenk. ORANGE FREE STATE: 3 ♀, Ventersburg, 20.iii.1976, A. S. Dippenaar. NATAL: 3 ♂, 4 ♀, Dukuduku Nature Reserve, 31.iii.1977, grass, sweepnet, A. S. Dippenaar; 3 ♀, Empangeni, 25.x.1977, P. Reavell.

Microlinyphia aethiopica (Tullgren).

MATERIAL EXAMINED. TRANSVAAL: 1 ♀: Bethal (at 10 km), 13.iv.1978, grass, sweepnet, S. Stiermie.

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